

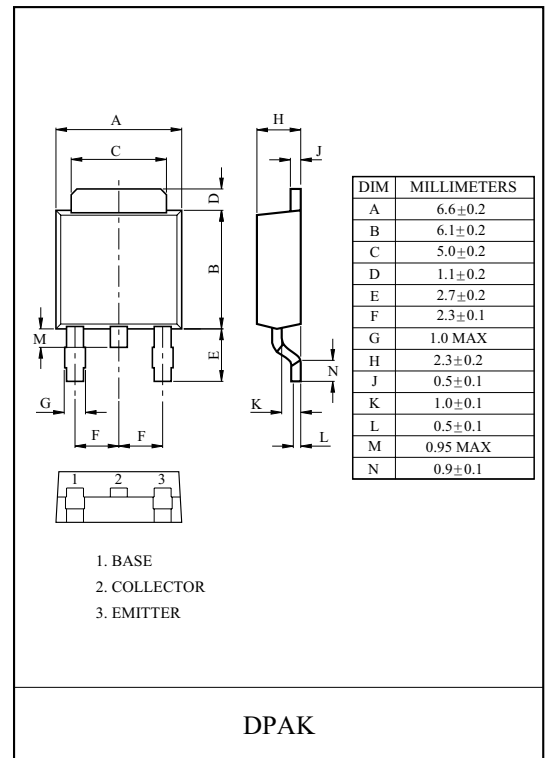
LED DRIVE APPLICATION

FEATURES

- Adoption of MBIT processes.
- Low collector-to-emitter saturation voltage.
- Fast switching speed.

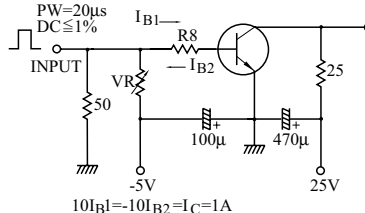
MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	60	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	3	A
Collector Current(Pulse)	I_{CP}	6	A
Base Current	I_B	600	mA
Collector Power Dissipation	Ta=25	PC	1 W
	Tc=25	PC	15 W
Junction Temperature	Tj	150	
Storage Temperature Range	Tstg	-55 ~ 150	

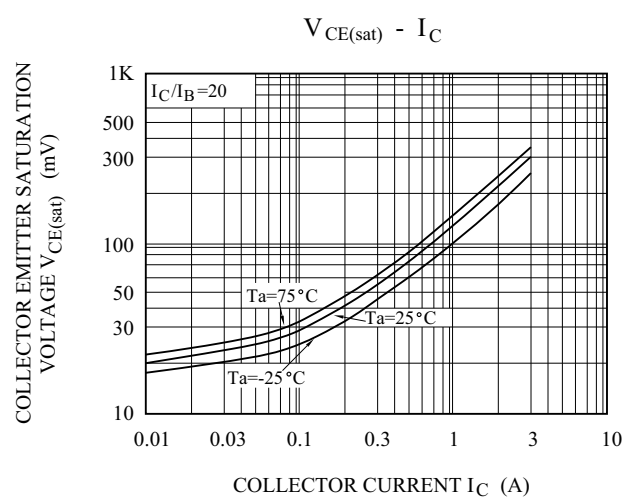
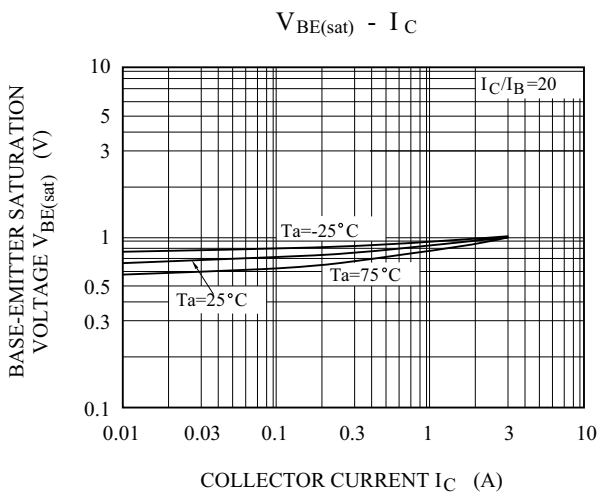
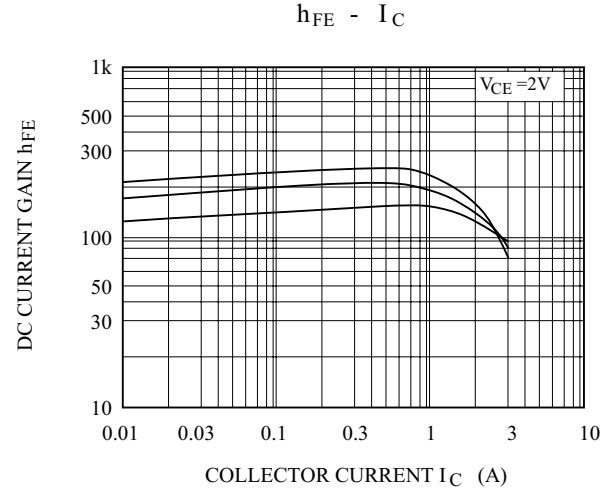
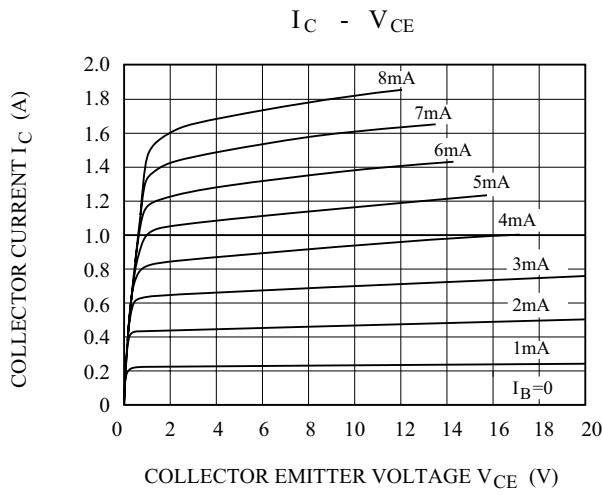
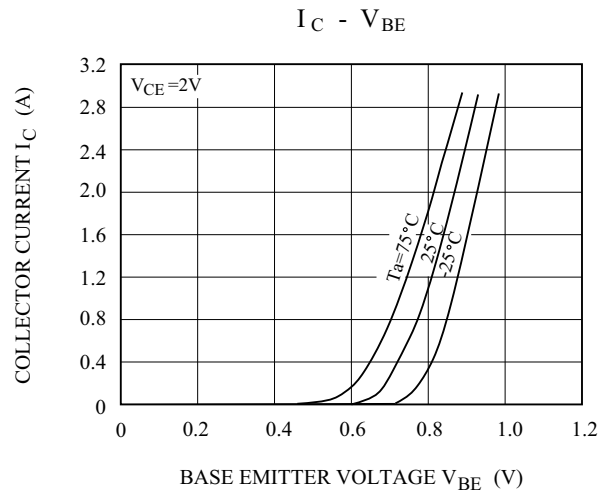
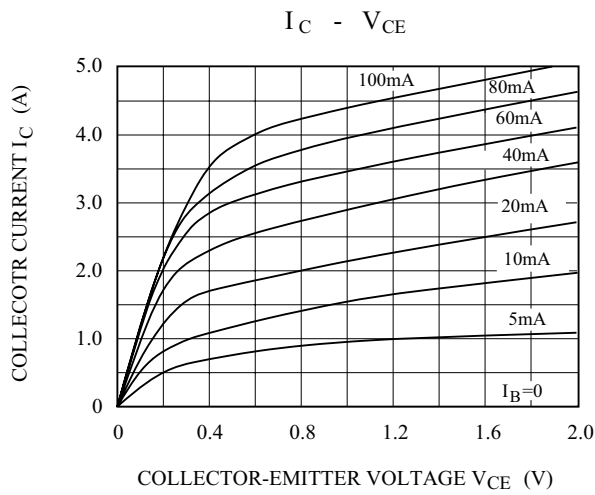


ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Collector Cut-off Current	I_{CBO}	$V_{CB}=40V, I_E=0$	-	-	1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=4V, I_C=0$	-	-	1	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=2V, I_C=100mA$	200	-	400	
	$h_{FE}(2)$	$V_{CE}=2V, I_C=3A$	35	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}(1)$	$I_C=2A, I_B=100mA$	-	0.19	0.5	V
	$V_{CE(sat)}(2)$	$I_C=360mA, I_B=2mA$	-	-	0.3	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=2A, I_B=100mA$	-	0.94	1.2	V
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, f=1MHz, I_E=0$	-	25	-	pF
Switching Time	Turn-on Time	t_{on}	-	35	-	nS
	Storage Time	t_{stg}	-	470	-	
	Fall Time	t_f	-	90	-	



KTC2825D



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